Engineered Products



PLASTICS

voestalpine INSERTS FOR TEST TUBES designed for pure performance

Inserts for test tubes are used in plastic injection molding, where they provide optimized cooling designs and high wear resistance.

YOUR ADDED VALUE

Our inserts for test tubes are produced using additive manufacturing and **premium materials by BÖHLER/ Uddeholm**. The test tube inserts provide optimized conformal cooling structures that enable our customers to perform stable and highly efficient production process resulting in a cost reduction per produced part.

This ready to use solution offers an improved cycle time, reducing the overall cycle time by up to 30% compared to conventionally manufactured drilled cooling channels. Improved part tolerances are also achieved through homogeneous and conformal cooling designs that lead to decreased scrap rates.

Many global acting plastic injection molding companies, working within several industries, have confirmed the premium functionality and profitability of our wear and corrosion resistant inserts for test tubes.

INDUSTRIAL PERFORMANCE COMPARISON

- » Cycle time reduction up to 30%
- » Part tolerance improvement
- » Reduced scrap rate

Main Properties

High corrosion resistance

High wear resistance, typically 49-53 HRC

High ductility (safety against cracks)

Advanced polishability

Good machinability



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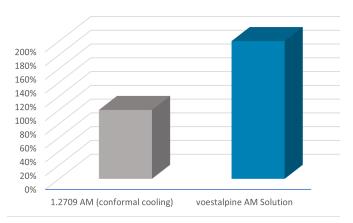


OUR MATERIALS

С	Si	Mn	Cr	Ni	Мо	Al
0.03	0.30	0.30	12.00	9.20	1.40	1.60

С	Cr	Ni	Мо	Al	Ti
< 0.02	12.20	10.00	1.00	0.60	1.00

INDUSTRIAL PERFORMANCE COMPARISON



Lifetime Improvement

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